

CLAIMS

1. A head slider which has a head part and which performs at least one of recording and reproducing by the head part in a state in which the head slider floats over a recording medium, which comprising:

a first air bearing part which is disposed on an air inflow end side on a base surface;

a second air bearing part which is disposed closer to an air outflow end side than the first air bearing part on the base surface and which has the head part and has an area smaller than that of the first air bearing part;

a pair of positive pressure generating parts which is disposed on both sides of a center axis of the head slider in the longitudinal direction closer to the air outflow end side than a step part formed between the first air bearing part and the base surface on the air inflow end side;

a side rail parts which are disposed between the first air bearing part and one positive pressure generating part of the pair of positive pressure generating parts, and between the first air bearing part and the other positive pressure generating part of the pair of positive pressure generating parts; and

an outside side rail parts which are disposed outside the pair of positive pressure generating parts with respect

to the center axis of the head slider in the longitudinal direction.

2. The head slider of Claim 1, further comprising:
a first step part which is disposed between the base surface and the first air bearing part; and

a second step part which is disposed between the base surface and the second air bearing part.

3. The head slider of Claim 1, wherein a negative pressure generating part is provided in an area surrounded by the first air bearing part, the second air bearing part, and the side rail parts.

4. The head slider of Claim 1, wherein the first air bearing part, the second air bearing part, the side rail parts, the outside side rail parts and the pair of positive pressure generating parts are formed at the same height from the base surface.

5. The head slider of Claim 2, wherein the first step part and the second step part are formed at the same height from the base surface.

6. The head slider of Claim 1, wherein distance D1 in

the longitudinal direction from the air inflow end of the head slider to a border part of the pair of positive pressure generating parts on the air inflow end side satisfies a relationship below where a length of the head slider in the longitudinal direction is DT:

$$0.47 \leq (D1/DT) \leq 0.66$$

7. The head slider of Claim 6, wherein distance D2 in the longitudinal direction from the air inflow end of the head slider to the step part of the first air bearing part satisfies a relationship below where a length of the head slider in the longitudinal direction is DT:

$$0.18 \leq (D2/DT) \leq 0.35$$

8. A head support unit comprising:

the head slider of Claim 1; and

a suspension which applies a predetermined thrusting force with respect to the head slider from a side opposite to a side on which the first air bearing part and the second air bearing part are disposed on the base surface.

9. The head support unit of Claim 8, wherein the suspension has a pivot part which applies the predetermined thrusting force with respect to the head slider.

10. A disk drive apparatus comprising:
the head support unit of Claim 8;
a disk-shaped recording medium;
a drive part which rotates and drives the disk-shaped recording medium;
a rotating part which rotates the suspension of the head support unit in a radial direction of the disk-shaped recording medium; and
a control part which controls the rotation and drive of the drive part and the rotation of the rotating part.

11. The disk drive apparatus of Claim 10,
wherein the suspension of the head support unit has a pivot part which applies a predetermined thrusting force with respect to the head slider;

wherein when a position at which the pivot part is abutted against the head slider is set to a pivot position, the position of the center of gravity and the pivot position of the head slider projected onto the disk-shaped recording medium are matched with each other.